

Application Serial No.: 09/896,682  
Attorney Docket No.: 01CON303P

**In the Claims:**

**Claim 1 (previously presented):** A method for coding a speech signal comprising:

estimating a spectral content of a speech signal by determining a defined reference spectral response representative of the spectral content of the speech signal;

selecting a preferential coding algorithm from an assortment of coding algorithms based on the estimated spectral content of the speech signal;

coding the speech signal in accordance with the selected coding algorithm, where the selected algorithm controls the operation of at least one of a pre-processing filter, a post-processing filter, a coding control coefficient, a weighting filter, a synthesis filter, and a quantization table;

wherein the coding of the speech signal in accordance with the selected coding algorithm compensates for at least one of a spectrally flat speech signal, an IRS speech signal, and a MIRS speech signal to produce a frequency-response compensated speech signal.

**Claim 2 (canceled).**

**Claim 3 (original):** The method according to claim 1 wherein the selection of the preferential coding algorithm comprises selection of a desired filter response of the pre-processing filter, the desired filter response configured to enhance perceptual voice quality of the coded speech signal based on the estimated spectral content.

Application Serial No.: 09/896,682  
Attorney Docket No.: 01CON303P

**Claim 4 (original):** The method according to claim 1 wherein the selection of the preferential coding algorithm comprises selection of a desired filter response of the post-processing filter, the desired filter response configured to enhance perceptual voice quality of the coded speech signal based on the estimated spectral content.

**Claim 5 (original):** The method according to claim 1 wherein the selection of the preferential coding algorithm comprises selection of a desired filter response of the weighting filter, the desired filter response configured to enhance perceptual voice quality of the coded speech signal based on the estimated spectral content.

**Claim 6 (original):** The method according to claim 1 wherein the selection of the preferential coding algorithm comprises selection of a desired filter response of the synthesis filter, the desired filter response configured to enhance perceptual voice quality of the coded speech signal based on the estimated spectral content.

**Claim 7 (original):** The method according to claim 1 wherein the selection of the preferential coding algorithm comprises selection of a desired filter response of at least one of the synthesis filter and the weighting filter of an adaptive codebook section of an encoder.

**Claim 8 (original):** The method according to claim 1 wherein the selection of the preferential coding algorithm comprises selection of a desired filter response of at least one of the synthesis filter and the weighting filter of a fixed codebook section of an encoder.

Application Serial No.: 09/896,682  
Attorney Docket No.: 01CON303P

**Claim 9 (original):** The method according to claim 1 wherein the quantization table comprises at least one of an adaptive codebook section and a fixed codebook section of an encoder.

**Claim 10 (previously presented):** A method for coding a speech signal, the method comprising:

estimating a spectral content of a speech signal by determining a defined reference spectral response representative of the spectral content of the speech signal;

varying at least one coding parameter based on the estimated spectral content of the speech signal;

coding the speech signal in accordance with the varied coding parameter, the varied coding parameter associated with at least one of a preprocessing filter, a post-processing filter, a coding control coefficient, a weighting filter, a synthesis filter, and a quantization table;

wherein the coding of the speech signal in accordance with the varied coding parameter compensates for at least one of a spectrally flat speech signal, an IRS speech signal, and a MIRS speech signal to produce a frequency-response compensated speech signal.

**Claim 11 (canceled).**

**Claim 12 (original):** The method according to claim 10 wherein the variation of the at least one coding parameter comprises selection of a desired coding parameter of the pre-

Application Serial No.: 09/896,682  
Attorney Docket No.: 01CON303P

processing filter, the desired coding parameter configured to enhance perceptual voice quality of the coded speech signal based on the estimated spectral content.

**Claim 13 (original):** The method according to claim 10 wherein the variation of the at least one coding parameter comprises selection of a desired coding parameter of the post-processing filter, the desired coding parameter configured to enhance perceptual voice quality of the coded speech signal based on the estimated spectral content.

**Claim 14 (original):** The method according to claim 10 wherein the variation of the at least one coding parameter comprises selection of a desired coding parameter of the weighting filter, the desired coding parameter configured to enhance perceptual voice quality of the coded speech signal based on the estimated spectral content.

**Claim 15 (original):** The method according to claim 10 wherein the variation of the at least one coding parameter comprises selection of a desired coding parameter of the synthesis filter, the desired coding parameter configured to enhance perceptual voice quality of the coded speech signal based on the estimated spectral content.

**Claim 16 (original):** The method according to claim 10 wherein the variation of the at least one coding parameter comprises selection of a desired coding parameter of at least one of the synthesis filter and the weighting filter of an adaptive codebook section of an encoder.

Application Serial No.: 09/896,682  
Attorney Docket No.: 01CON303P

**Claim 17 (original):** The method according to claim 10 wherein the variation of the at least one coding parameter comprises selection of a desired coding parameter of at least one of the synthesis filter and the weighting filter of a fixed codebook section of an encoder.

**Claim 18 (original):** The method according to claim 10 wherein the quantization table comprises at least one of an adaptive codebook section and a fixed codebook section of an encoder.